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A STUDY OF THE COMPARISON BETWEEN THE "JOPLIN PLAN"
AND THE TRADITIONAL PLAN OF TEACHING READING

BY

ALICE MAE HIPPEN

A thesis submitted
in partial fulfillment of the requirements for
the degree Master of Science, Major in
Education, South Dakota State
University

1966

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A STUDY OF THE COMPARISON BETWEEN THE "JOPLIN PLAN"
AND THE TRADITIONAL PLAN OF TEACHING READING

This thesis is approved as a creditable and independent investigation by a candidate for the degree, Master of Science, and is acceptable as meeting the thesis requirements for this degree, but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Adviser

Date

Head, Education Department

Date

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AMH

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CHAPTER I

INTRODUCTION

Statement of the Problem

The importance of reading is clearly recognized in the educational field. A student who fails to read is handicapped in attaining academic success. Many desirable occupations will be closed to him.

As a child progresses in gaining an education, there is a greater dependence upon reading skill. Each grade makes increasing demands concerning the type of reading and the amount of reading required. The child with a reading problem finds himself more perplexed and the learning task becomes more difficult.

The problem is significant to teachers and school administrators because the reading program must constantly be improved to provide ways and means of correcting the reading deficiencies of some students and, at the same time, of expanding and enriching the reading curricula for other students. A far-better educated populace is required in this Atomic and Space Age.

Scientific investigations have revealed great differences in the learning ability among students, making it the task of all concerned with education to become fully aware of individual differences. New approaches to reading instruction are required to replace the approaches which are no longer effective in making provisions for individual differences.

Many reading approaches and grouping arrangements have been used successfully in many schools. By gaining an understanding of these

approaches, new methods and grouping plans may be introduced to fit a particular grade, school, or system. The future reading success of certain youngsters may depend upon these innovations. This study involves two grouping plans. They are the traditional plan and the Joplin Plan.

The Traditional Plan for Reading Instruction

The traditional plan for reading instruction can be described as "the conventional textbook approach."¹

According to Gray, the traditional reading curricula were organized chiefly in terms of activities assumed to be desirable at the respective grade levels. The work prescribed and the standards for achievement were uniform.²

The traditional plan involves grouping students by grade-levels for instructional purposes. Students are divided into two or three groups within the classroom according to their reading-achievement levels. The students are assigned to a basic reader which is best suited for the majority of the students in one specific group.³ The control group reported in this study was instructed in reading by this approach.

¹Paul Witty, "Reading Instruction--A Forward Look," Elementary English, March, 1961, p. 156.

²W. S. Gray, Child Development and the Curriculum, pp. 185-86, as quoted in W. A. Saucier, Theory and Practice in the Elementary School (New York: Macmillan Company, 1951), p. 207.

³Albert J. Harris, "Grouping by Reading Level," How to Increase Reading Ability (New York: David McKay Company, Inc., 1961), p. 124.

The Joplin Plan for Reading Instruction

The Joplin Plan for reading instruction is a cross-grade plan. In this plan certain elementary school children in the intermediate grades receive reading instruction from teachers other than their home-room teachers. The reading groupings are made according to reading-grade levels which are determined from standardized reading-test scores. Reading instruction will include one or two levels in each classroom. Each classroom may have students from grades four, five, and six.

Those who have used the plan believe that it has been effective in the instruction of reading.⁴ The experimental group included in this study received reading instruction by this method.

The Problem

The primary purpose of this study was to evaluate the Watertown version of the Joplin Reading Plan and to compare the reading results obtained by a selected group in the Joplin Plan and by a selected group in the traditional reading plan. An attempt was made to answer the following questions:

1. What gains in reading achievement have been made by the selected students in the Joplin Plan and in the traditional plan for reading instruction between the time of the third-grade testing and the sixth-grade testing?
2. To what extent do the means of the gains achieved by the

⁴ Nila B. Smith, Reading Instruction for Today's Children, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), p. 125.

experimental group in Roosevelt Elementary School⁵, using the Joplin Plan in reading, compare with the means of the gains achieved by the control group in Lincoln Elementary School⁶, using the traditional reading plan?

3. To what extent were the reading-grade scores (stated in Mean-grade scores) commensurate with the mental-grade scores (stated in Mean-grade scores) of the fourth-, fifth-, and sixth-grade classes in Roosevelt and Lincoln Schools from 1961-1965?

4. To what extent has the Joplin Plan been beneficial to students having intelligence quotients of 110 and above?

5. To what extent has the Joplin Plan been beneficial to students having intelligence quotients below 100?

6. What are the reactions of the teachers involved in teaching the Joplin Plan?

7. What were the reactions of the parents regarding the Joplin Plan?

8. How do students react to the Joplin Plan grouping?

9. What other reading approaches have proved successful?

10. What other grouping arrangements have been used in addition to the traditional plan and the Joplin Plan?

Method of Study

Several factors were considered in the selection of the control and experimental groups used in this study. The first factor considered

⁵Hereafter designated in this study as Roosevelt School.

⁶Hereafter designated in this study as Lincoln School.

was attendance in the Watertown Public Schools throughout the elementary grades. The Joplin Plan and the traditional plan for reading instruction were used simultaneously in the elementary schools. This permitted both plans to operate under the same school administration and to participate in the same testing program for measuring progress in reading and for measuring the intellectual abilities of the students. The time sequence and the forms of tests used followed a routine pattern set by the school administration.

The second factor considered was the selection of schools. Lincoln School never participated in the Joplin Plan. The traditional plan for reading instruction was used. Roosevelt School was selected as the source for the experimental group because the Joplin Plan has been used continuously in this school since 1958.

The third factor considered was that the enrollment in grades three to six in Roosevelt and Lincoln Schools be successive. This continuous enrollment was deemed essential in order to keep the two groups as equal as possible. The students selected for the control group were limited to those who received the traditional reading instruction while attending Lincoln School, and the students selected for the experimental group were limited to those receiving the Joplin Plan for reading instruction while attending Roosevelt School.

The names of the students who had attended Roosevelt and Lincoln Schools during the years 1960-1965 were obtained from questionnaires which were given to the 845 Watertown Junior High School students in the English classes in the year 1965-1966. A copy of the questionnaire is in the Appendix of this study. From this survey twenty-five students

were identified as having attended Lincoln School continuously in grades three to six. During the same period 110 students attended Roosevelt School continuously, in grades three to six.

The other factors considered were related to the qualifications of the experimental group when pairing these students with the students in the control group in reading. The selection of the individual members of the experimental group was based upon the age level, sex distribution, intelligence rating, and family socio-economic background of the individual members in the control group.

The permanent school records on file in the office of the Watertown Junior High School were used to obtain the data for those students whose names were obtained from the questionnaires. The students from Lincoln School were given numerical identification, and a chart was established to list the pertinent data requested from the records. Following the assigned number, each student was identified according to age, sex, the intelligence quotient⁷, the reading-grade score obtained from the spring testing program during grades three to six, the address of the student, and the employment of the parent. Identical information was secured for each student who had attended Roosevelt School continuously in grades three to six. This information was recorded on the bottom of the questionnaires of the Roosevelt students. The sex, age, I. Q., and reading-grade achievement scores were recorded on the line in the lower right-hand corner. The address of the student and the employment of the

⁷As measured in the fourth grade by the Kuhlmann-Anderson test battery which was given to every student enrolled in the Watertown school system.

parent were written in the bottom margin. All addresses and parental employment were checked with the 1965-1966 school records. Any changes were considered when selecting the experimental group. These records were used in pairing the members of the two groups.

The individual members of each pair of students in this study were matched on the basis of age, sex, intelligence rating, and family socioeconomic background. Equal age in years and identical sex distribution were maintained in the pairs. The intelligence quotients were compared as closely as possible, allowing for a maximum range of ten points. The addresses of the students were used in determining similar environmental influences. Mr. Arthur F. Lanham, manager of the Watertown branch of the Employment Security Department of South Dakota assisted in placing each experimental-group student in a comparable economic bracket with each control-group student. Mr. Lanham was given a list of experimental-group students who were similar in the characteristics previously mentioned as factors controlling the selection of the experimental group.

Delimitations of the Study

The number of students available for study in the control group was not large because of the limited number of students who remained on roll in Lincoln School continuously in grades three to six. The study was confined to students in a control group who were instructed by the traditional plan for reading and who did not receive any reading instruction under the Joplin Plan. This limitation was deemed necessary to maintain a true grouping.

Other variables, such as the emotional background of the child, the personality of the teacher, the qualifications of the teacher, and the expectations of the parents, were not considered in this study. These variables were not controlled in the public-school setting.

Chapter I of this study is concerned with the statement of the problem, the introduction of the two plans for reading instruction used in this study, and the method of study. Chapter II reviews various grouping plans and approaches to reading instruction which have been successfully employed in schools. Chapter III analyzes the data collected, and Chapter IV summarizes the study, draws conclusions, and makes recommendations applicable to the findings.

CHAPTER II

SURVEY OF LITERATURE

A variety of grouping arrangements and teaching approaches has been used in the continual search for more efficient means for reading instruction. The results of research pertaining to grouping arrangements were conflicting. Perhaps the chief reason why research on groupings was so inconclusive was that the real bases for grouping were too varied and too numerous to lend themselves to one set pattern. In any grouping plan it is essential to consider reading achievement, potential for achievement (intelligence), initiative, emotional stability, and capacity for self-direction. The possibilities for changing from one group to another must also be considered.⁸

Chapter II of this study was prepared to review the development of various groupings and teaching approaches which have led to the formation of the traditional plan and the Joplin Plan for reading instruction. More recent developments were reviewed to relate the continued efforts made to improve the instruction of reading.

Early Grouping Arrangements

During the 1600's and 1700's dame schools, private tutors, schools established by religious auspices, and philanthropic societies educated

⁸Billy K. Raabe, "New Patterns of Grouping for Reading Instruction in Grades Four Through Six," Reading Instruction in Various Patterns of Grouping, Vol. XXI of The Proceedings of the Annual Conference on Reading (Chicago: University of Chicago, 1959), p. 52.

a smattering of the youth in America. Then, in the 1800's the rapid expansion of America and the emerging public tax-supported schools created an expanding instructional era.

At first the "Monitorial System," imported from England, was hailed as the solution for educating the masses. In this plan from seventy to three hundred students gathered in one room with one teacher. This larger group was subdivided into smaller groups, and each was taught by one of the abler students who was called a "monitor."

In the 1840's, Germany began grouping the classes according to age and ability with one teacher to a class. This idea was adopted in America, and the grade system evolved from it.⁹ It was during this time period that the McGuffey Readers dominated the educational scene. These were the first carefully-graded readers with one book for each grade.¹⁰ This was the foundation for the traditional reading plan.

ARRANGEMENTS FOLLOWING THE SCIENTIFIC INVESTIGATIONS

After 1910, with the advent of scientific investigations based on intelligence and achievement tests¹¹, new ideas were formulated. Classroom organization was based on scores made in these tests. Two of the early grouping arrangements which evolved from these investigations were related to the plans involved in this study.

⁹Smith, p. 109.

¹⁰Idem, American Reading Instruction (New York: Silver Burdett and Co., 1934), p. 105.

¹¹Lee J. Cronback, "Measurement of General Ability," Essential of Psychological Testing, (2d ed., New York: Harper and Row, 1960), pp. 157-61, passim.

The XYZ Grouping

Homogeneous grouping on the basis of intelligence was introduced in 1920 by Dr. Charles S. Berry in the Detroit school system. Ten thousand children entering first grade were divided into three groups according to their intellectual ability. The "X Group" was composed of the upper twenty per cent of the children, the "Y Group" contained the average children who represented sixty per cent of the pupils, and the "Z Group" constituted the lower twenty per cent. Differentiated curricula were provided each group in accordance with ability.

Two criticisms leveled against this system were the following:

(1) It was undesirable from social and psychological viewpoints to keep all children of a certain intellectual level together for instructional purposes; and (2) there was much overlapping of achievement in different content subjects.¹²

The Joplin Reading Plan was organized on a basis similar to the XYZ Grouping. The reading groupings were made on achievement levels on a cross-grade plan when it was found that from six to seven different achievement levels could be found in each grade.¹³

¹²Charles S. Berry, "The Introduction of Homogeneous Grouping," The Grouping of Pupils, Part I, Thirty-Fifth Yearbook (Bloomington, Ill.: National Society for the Study of Education, 1936), pp. 37-38.

¹³The "Joplin Plan" of Teaching Reading, mimeographed (Joplin, Mo: The School District of Joplin), p. 2.

The Three-Group Plan

The groups in this plan were organized on achievement levels which were determined by reading-achievement scores. In larger schools the students in one grade were divided into high, average, and low groupings. Each grouping was placed in a separate classroom. In smaller schools with one classroom for each grade, the teacher divided the students into three groups for instructional purposes. This was often done in reading classes. Many of the teacher's manuals accompanying the basic reading textbooks were arranged to provide instruction for three levels in the primary grades and for two levels in the intermediate grades.

The criticisms directed against this plan were similar to those against the XYZ Plan: (1) A wide variation exists in achievement, rate of progress, and motivational drives among pupils in any one of the three groups: and (2) the plan was undesirable from a psychological and social point of view.¹⁴

This type of grouping arrangement was present in the traditional plan for teaching reading. The intermediate classroom was divided into two reading groups, and separate basic reading texts were used in accordance with the two reading levels which encompassed the greater numbers of students.¹⁵

¹⁴Smith, Reading Instruction for Today's Children, p. 111.

¹⁵Harris, loc. cit.

NEW CONCEPTS OF GROUPING

The new concepts of groupings recognize individual differences in all phases of child development. Children vary not only in reading ability but also in intellectual capacity, rate of growth, motivational drive, experience, interests, social maturity, and social preference. The most effective grouping plan gives consideration to all these factors. A reading class organized to respect and utilize all growth factors can be more promising than one which uses only one factor as the basis of its organizational plan.¹⁶

Flexibility in the One-Grade Classroom

This plan of classroom organization revealed two main kinds of grouping. One kind of flexibility permitted children to move from one group to another whenever it became evident that their reading needs could be better met in a new group. This would permit advancement for some students and replacement for other students who floundered in a grouping which had proven to be too difficult. The second kind of flexible grouping allowed the use of different groupings simultaneously. In reading classes with a wide range of ability, grouping for developmental reading was made according to reading achievement, but provisions were also made for specific needs grouping as the needs became apparent. Harris reported that the advantage of this grouping was the elimination of a "rigid caste system in which the poorest readers became untouchables."¹⁷

¹⁶Smith, Reading Instruction for Today's Children, p. 114.

¹⁷Harris, pp. 127-28.

According to Smith, the teacher had a major role in this plan. The teacher was responsible for developing an instructional program which would fit the needs and interests of the students. There were occasions when the class would meet as one group when interests and needs warranted it. At other times the class would be divided into special needs' groupings, special interest groupings, or special social groupings. Only the teacher could organize, disband, and reorganize groups on a daily, weekly, or monthly basis to insure a well-rounded program for each child.¹⁸

Team Teaching

Team teaching was listed as one of the newer plans for classroom organization. Many variations of the plan were given, but in all cases, the "team" of teachers had mutual responsibility for planning, developing, and evaluating the instructional program.¹⁹

In the more formal plan, one teacher met all students of nearly the same achievement level from different classes and instructed them in the same manner as she would have taught a smaller group in her own classroom. Classroom teachers and teacher assistants provided for follow-up practice or explanation with smaller groups of students.

This plan has become increasingly more popular in the secondary schools.²⁰

¹⁸Smith, pp. 114-16.

¹⁹Ibid., pp. 13-14.

²⁰Leonard H. Clark, Raymond L. Klein, and John B. Burks, The American Secondary School Curriculum (New York: The Macmillan Co., 1965), p. 408.

The Joplin Plan for Reading Instruction

The Joplin Plan for reading was devised in 1953 when it became apparent that the three-group plan was no longer adequate for meeting individual reading differences.

The experimental school included five teachers in grades four through six and approximately 200 students. Parents and teachers were willing to participate in the program. The experiment was scheduled for one semester.

Tests administered when the plan was initiated revealed the need for nine reading-grade levels. Four of the teachers taught two levels, and one instructor taught one level. No fourth-grade students were placed in a group studying the basal seventh- or eighth-grade materials. It was felt that these groups were too advanced for the study-skills, and that the pressure on the children was too intense. The groups remained flexible to permit a child to move from one group to another if such a move was desirable for his better progress.

The success of the program was gratifying. The following statements were made in a brochure prepared to explain the Joplin Plan.

In two or three days there was very discernible evidence of greater interest on the part of all children in their reading. Some were finally reading material and studying skills they could understand instead of trying to do reading tasks they couldn't solve. Many others were no longer bored and unchallenged because they were being held back, but finally had been given reading jobs which taxed their abilities.

Teachers found they could accomplish more in the same amount of time because the level or levels which they were teaching²¹ contained children who could do all the reading tasks being taught.

²¹The "Joplin Plan" for Teaching Reading, p. 4.

Each day a twenty-minute period for recreational reading was placed on the instructional program in the half-day opposite the basal program. During this period, students remained in their respective rooms and were supplied with various types of reading materials on all levels. Charts were kept, and voluntary discussions were held on the books read. Many students who had done very little reading of this type became interested in reading, and each read several books. Parents reported that an increase in reading interest was shown at home.

Table I states the gains by tests of individual students during the four-month instructional period in the Joplin, Missouri, experimental school.

TABLE I

Pupil	Score on First Test	Score on Final Test	Gains in Months
1	8.7	10.4	15
2	7.9	10.2	20
3	7.0	10.1	28
4	5.3	7.4	19
5	3.8	5.7	17
6	3.2	4.7	14
7	5.8	8.5	24
8	2.8	4.6	16
9	1.9	4.2	20
10	1.1	2.4	12

Gains were given in terms of
Grade reading achievement level.*
*(From The "Joplin Plan" of Teaching
Reading, p. 5.)

It could not be determined whether these results were truly representative of the gains or whether the gains were made by specific children. The report did state that most children progressed several

months. Only a few did not.

A special report card was designed to replace the regular mark given in reading. A copy of this card is in the appendix of this study.

At the close of the 1964-1965 school year, there were approximately 500 students who were studying materials above the sixth-grade reading level. Test results showed the average grade-achievement of 8.8 for the 500 students. Approximately 100 students attained either a tenth- or eleventh-grade reading achievement level. Prior to implementing this program, no student had ranked above the ninth-grade reading achievement level.

More than 2000 students have participated in this program since 1953. It is reported that test results have shown continued progress since the adoption of this plan.²²

A study conducted by Wallace Ramsey in two schools in Logansport, Indiana, during the school years 1958-1960 revealed the cross-grade plan to be effective in producing expected reading gains for the three-grade levels when each group was considered as a whole. Part of the study covered the upper and lower thirds of the student body to determine the effectiveness of the plan for these levels. For those students in the upper one-third in intelligence, the study revealed the plan to be effective in producing gains equal to or greater than expected. The gain expected was .85, and the actual gain was reported as .91. An exception was made concerning the fourth-grade vocabulary.

For those students in the lower one-third in intelligence, the plan

²²Ibid., pp. 5-6.

did not prove to be effective in producing expected gains in grades four and six. The gain expected in grade four was .70, and the total gain was .58. In grade six the gain expected was 1.58, and the total gain was 1.38. Grade five surpassed the expected gain of 1.63 with a total gain of 1.89.

The teachers generally favored the program and believed it to be effective in caring for individual differences. One teacher expressed a reservation concerning the effectiveness of this plan for the retarded reader.

The children involved in the study had few objections to the plan. It was reported in the study that one-fifth of the student body had listed reading as a favorite subject, and one-third of the students designated reading as a favorite leisure-time activity.²³ No comparative figures were available concerning the attitudes of the students prior to the adoption of the plan.

The Austin Plan for Reading Instruction

The Austin Plan used in the Austin Junior High School, Austin, Minnesota, has not received nation-wide publicity. This plan for reading instruction was initiated in the fall of 1950. Two experimental groups of slow learners were organized. After two years of experimentation, the plan was expanded to include all seventh and eighth graders for one semester of reading instruction.

The reading program was divided into four major areas of

²³Wallace Ramsey, "An Evaluation of the Joplin Plan of Grouping for Reading Instruction," The Journal of Educational Research, Vol. 55, (August, 1963), pp. 567-72, passim.

concentration. The areas covered were word study and vocabulary development, comprehension, work study activities, and recreational reading. Four days of each week were devoted to these areas. Each reading-grade level worked in one of the four areas of concentration on a rotating plan, which made it possible for each group to spend one day on activities in each of the areas.

Fridays were reserved for recreational reading of books selected from the public or school library, Teen Age Book Club lists, or home libraries, provided the book appeared in the catalogs of the school or public library. Book reviews were written or given orally.

Various basal readers, workbooks, and reading devices were made available on the appropriate reading-grade levels. With one-fourth of the class working in one of the major areas at one time, no more than ten books or workbooks at any level were needed.²⁴

In evaluating the Austin developmental reading program, Eleanor Carlson made the following statement:

It is felt that the reading program very definitely contributes to the mental health of students. Greater self-confidence has been developed in those pupils whose repeated failures have resulted in much frustration in school. A student is freed from fear of failure when he is given activities at a level at which he can reasonably expect to succeed. He begins to develop faith in himself as a worthy individual. He realizes and accepts his limitations, at the same time trying to improve. Working on an individual basis, a pupil is freed from impossible competition with others. He can work at a comfortable pace, without tensions and pressures.²⁵

²⁴Eleanor Carlson, Seventh- and Eighth-Grade Developmental Reading Program, mimeographed (Austin, Minn.: Austin Junior-Senior High School), pp. 1-6, passim.

²⁵Ibid., p. 4.

The Austin Plan and the Joplin Plan were similar in grouping arrangements. Both plans grouped students according to the reading-grade levels. The Austin Plan involved the seventh and eighth grades while the Joplin Plan included the fourth, fifth, and sixth grades.

APPROACHES TO READING INSTRUCTION

In addition to the plan of grouping, the approach adopted to teach reading occupies an important position in the overall reading program. Whether they receive instruction on an individual, small-group, or large-group basis, almost all students must be taught how to read.

Several approaches have been advanced for the improvement of reading instruction. The majority of these have been designed for the primary grades. The approaches which were reviewed for this study have been used in the intermediate grades.

The Basic-Reader Approach

Both the Joplin Plan and the traditional reading plan which were compared in this study have used the basic-reader approach in the instructional program. This approach was also used in the Joplin, Missouri, program.²⁶

In this approach, several different series of readers were used, each of which provided reading textbooks together with workbooks and teacher's manuals. The series covered all levels from grades one to six, and in many cases, grades one to eight. Vocabulary was carefully controlled from book to book, and a systematic presentation of basic

²⁶The "Joplin Plan" for Teaching Reading, p. 1.

reading skills was developed throughout each of the series. Enrichment activities and supplemental books to read on various topics were provided.

The following misuses of basic readers as well as desirable uses of them were listed by Nila Banton Smith in Reading Instruction for Today's Children.

Misuses of Basic Readers

1. Considering the basal reader, itself, as the whole program for reading instruction.
2. Using one grade level of basic reader with an entire class regardless of the different instructional levels of the children.
3. Setting up the goal of having children cover all pages in a certain reader as the end-point objective of a semester's work.
4. Insisting that children should not work with a reader higher than the grade represented in their classroom so that the book for the next grade level may be fresh when he begins to work in that grade.
5. Permitting children to keep their basal reader in their desk or to take it home, thus providing them an opportunity to become familiar with stories before the teacher is ready to present them.
6. Using the teachers' guide as a detailed prescription to be followed exactly in all its aspects, or on the other hand disregarding it entirely.
7. Confining reading instruction largely to reading stories from the reader without a sufficient number of interspersed periods of skill development.
8. Failing to keep records of specific skills on which certain children need help, and providing extra practice on these skills over and above that provided for in the basic materials.
9. Using the basal reader for busy work in which the children are instructed to read from this book at their seats when they have nothing else to do.
10. Using workbooks indiscriminately with all children; failing to develop workbook pages with children who are not able to work independently with them without preceding explanation.

11. Simply directing children to read a story as a routine matter, without first building background and stimulating purpose.

12. Requiring purposeless re-reading.

13. Using the content of readers, which is mostly literature, as the sole basis for developing study skills needed in reading in the content areas.

Desirable Uses of Basal Readers

1. Use by the Inexperienced Teacher in a Group-Organized Classroom:

Until the beginning teacher becomes better acquainted with reading skills and techniques it is advisable for her to follow the sequence of the stories in the reader and to make careful use of the aids and instructions in the teachers' guide. It is hoped, however, that as she gains in experience she will become increasingly flexible in using the materials, more selective in choosing and following guide aids, more resourceful in creating supplemental practice materials and in providing interesting and productive practice activities of her own. From the very beginning she should, of course, extend her pupils' interests to many reading sources other than the basal reader and its accompanying materials.

2. Uses by the Experienced Teacher in a Group-Organized Classroom:

The teacher who is highly proficient in the teaching of reading will refer to the teachers' guide as a reference for helpful suggestions as she may need them rather than slavishly following the manual page by page. She may upon occasion have children read certain stories out of order (if they are not too advanced in difficulty) as these stories carry with them possibilities for skill development needed by the children at the time. She will use numerous and varied materials and activities for skill development, many of which she personally has created and prepared. She will stimulate extensive reading from other books.²⁷

The Television Approach

Televised instruction is a relatively new approach and undoubtedly will be used with increasing frequency in teaching a variety of subjects,

²⁷Smith, pp. 99-101.

including reading.

The reading material used in television reading programs is usually prepared by classroom teachers, often in conjunction with a reading consultant or studio teacher. Sometimes the programs are prepared entirely by the reading consultant or studio teacher.

When using the televised program, the usual procedure is as follows: the classroom teacher takes a few minutes to introduce the lesson before the presentation on television; often the television teacher conducts the lesson while the classroom teacher walks about the room giving assistance to those needing it. Following the television presentation, the classroom teacher conducts the discussion, individualizes the group presentation, and often gives tests to measure the amount of learning which has transpired as a result of viewing the telecast.²⁸

It was reported that the success or failure of televised instruction depended to a great extent upon the introductory activities and the follow-up activities provided by the classroom teacher. It was considered desirable to provide for a five- to ten-minute introduction before the telecast and for a twenty- to twenty-five-minute follow-up period for summarizing the lesson and giving individual help. Reports, panel discussions, films, and other activities could be used during the final period following the telecast.²⁹

²⁸Smith, p. 85.

²⁹J. Minor Gwynn, "Supplementary Materials and Curricular Aids," Theory and Practice of Supervision, (New York: Dodd, Mead, and Co., 1964), p. 112.

The Programmed Approach

Because of an ever-increasing enrollment and emphasis on independent study, programmed instruction and the teaching machine have entered the field of reading instruction.

In programmed instruction the material that is to be taught is first broken down into fundamental units and then regrouped into a logical progressive order. Questions on the material are asked, and answers are provided. The student may refer immediately to the answer after making each response. It is felt that by correcting any wrong response immediately, learning continually progresses.

This approach to learning is not recommended for all teaching. The development of interest in reading and the growth of taste and appreciation are important aspects of reading instruction. These are facets which do not lend themselves to routine practice and objective testing.

Programmed learning is best used with learning that is to be fixed, facts that have to be memorized, and processes that have to be made automatic. This frees the teacher from providing routine drill activities and allows her to instruct in areas which require explanation, guided thinking, and intelligent discussion.³⁰

Individualized Reading Approach

The individualized reading approach has been in use since the early twenties even though it has not received much attention in professional

³⁰Smith, pp. 82-85.

literature until recent years.³¹

Two methods of individualized instruction were reviewed by E. W. Dolch. The first method was the "moving-about" method. After each student had selected a book to read, the teacher moved about the room, giving individual help to those who needed it. The second method was the "read-to-the-teacher" method. During the individual conference period, the teacher sat in some particular spot in the room, and the student came to read to her. As the student read, the teacher noted his individual needs and gave him appropriate help. She recorded what he was reading, his needs, and his strengths on a sheet of paper. In addition to the teacher record, each student made his own record. This recorded the books and pages read, his evaluation of the books, interesting new words, words that were sounded out, and new ideas learned from reading.

Which of these methods is to be followed depends upon the age of the students, their preparation for self-help, and the teacher's opinion as to which method works best.³²

SUMMARY AND APPLICATION TO PRESENT STUDY

There has been a mutual concern throughout the history of reading in the approaches used for reading instruction and in the grouping plans

³¹Jill Eonney, and Levin B. Hanigan, "Individualized Teaching of Reading," Reading for Today's Children, 34th Yearbook of The National Elementary Principal (Washington, D.C.: NEA Department of Elementary Principals, 1955), p. 81.

³²Edward W. Dolch, Individualized Reading vs. Group Reading (Champaign, Illinois: Garrard Publishing Company, 1962), pp. 11-15.

within the school. This concern has been for the welfare of the individual child.

The grade system was first adopted in Germany whereby students were placed in groupings according to age and ability. Similar grouping arrangements were introduced in America in the 1800's with the advent of mass instruction created by the emergence of public tax-supported schools.

The McGuffey Readers were developed during this period to instruct students on a graded basis. These readers were the forerunners of the basic-reading series which have been used in both the traditional reading plan and the Joplin Plan.

Individual differences among students became an accepted fact as a result of the scientific measurements of general ability. The concept of individual differences has been carried to the present in the grouping plans and approaches to reading instruction. The Joplin Plan for reading was developed on this concept.

In the traditional intermediate classroom the maximum number of groupings usually was three. On this topic, Mrs. Jeannette Hallber, Elementary Supervisor in the Watertown Public Schools, stated, "Most teachers, even the good ones, say they do not have time for three groups in an hour." According to the Austin Plan, at least four grade-levels of reading will be found in homogeneous groupings. The Joplin Plan for reading which was designed for the intermediate grades provided instruction on six or more levels through the cross-grade plan.

It was the concern of this study to evaluate the traditional method and the Joplin Plan for reading instruction. It was noted in the survey

of the literature that three reading groups in one classroom were not sufficient to cover the reading range of the students. This study was organized as a comparative study of this type of classroom organization, which included the traditional reading plan as part of its study program, and of the type of classroom organization which included the Joplin Reading Plan with six or seven levels of reading instruction as part of its study program. An attempt was made to determine the significance of the difference between the means of the gains made by the selected groups in the two approaches to reading when taught within the same school district and tested with the same testing program.

CHAPTER III

THE JOPLIN PLAN AND TRADITIONAL PLAN
IN WATERTOWN PUBLIC SCHOOLSThe Watertown Version of the "Joplin Plan"

The Joplin Plan was first used on an experimental basis in the Roosevelt School during the 1959-1960 school year. Although no records were available for this year, it was acclaimed beneficial in terms of gains made and in increasing pupil interest in reading.

In 1961 the five larger elementary schools (Mellette, Grant, Garfield, McKinley, and Roosevelt) adopted the plan. Mr. Louis Woodward, principal of the McKinley Elementary School, stated that the adoption of the Joplin Plan depended upon specific variables. The variables listed by him were the kind of teachers in the school, the kind of pupils enrolled (whether they were receptive to this type of instruction on a cross-grade basis), and the spread of the reading range found among the students on standardized reading tests. This evaluation of each elementary school was made by the principal of that school. Because of the consideration of these variables by the principal, Lincoln School did not adopt the Joplin Plan.

A reading range of six or seven reading-grade levels was found among the students enrolled in the schools which adopted the Joplin Plan. There were six teachers in grades four through six in each of these schools. Each teacher was assigned one grade-level of reading. When the seventh level was required, the remedial reading teacher instructed the lowest level. This level ordinarily contained eight or nine students.

The reading-grade level in each of the classrooms which participated in the Joplin Plan varied from school to school. It usually ranged from the third-grade reading level to the top seventh-grade level.

When placing students in the various grade-levels, Mrs. Hallberg stated that the final reading-achievement test score from the previous grade, the work habits, emotional problems, and the potential of each student were considered. The groups were made flexible enough to enable a child to move from one group to another if such a move was desirable for his better progress. During the second semester, the groupings remained intact.

The traditional letter-grade mark was used in grading the students on the report card. In addition to this, a mimeographed form was used by the reading teacher to report specific items concerning the reading ability of each child. This included the reading level (whether above his grade level, on his grade level, or below his grade level), the study-skills in reading, comments on particular difficulties, and recommendations to parents to help solve those difficulties. These reports were given to the parents at the fall and spring parent-teacher conferences. A copy of this form is included in the appendix.

After the seventh year of operation in the Watertown school system, Mrs. Jeannette Hallberg, Elementary Supervisor, made the following written statement when asked if she considered the Joplin Plan to be more satisfactory than the traditional plan in reading instruction:

Yes. It reduces the range of reading ability within a classroom and thus enhances the possibilities of more nearly individualized instruction by the teacher.

It provides a program for the slow-learning child without the danger of continuous failure.

It permits an enrichment program for the rapid-learning individual.

We feel the Joplin Plan does allow for what appears to be a more nearly flexible learning situation in order to meet the great differences which are encountered among children.

Summary

The findings of the two geographical locations pointed out the need for a reading program to provide for the range of reading ability in a classroom. Both cities believed that the Joplin Plan provided for this reading range through the cross-grade plan. School personnel have long recognized the need for such a program.

TESTING EXPERIMENTAL HYPOTHESIS

Hypothesis

A study was made of grouping arrangements and approaches to reading instruction which have been successfully used in the intermediate grades and in various school systems. This study included the Joplin Plan for reading instruction in Joplin, Missouri, and the Watertown version of the Joplin Plan. The hypothesis in this study stated that the difference between the means of gains made by students participating in the Joplin Plan for reading instruction was significant when compared to gains made by students of similar caliber who received reading instruction by the traditional approach to reading .

Procedure for testing the hypothesis

A control group and an experimental group of students who had attended Lincoln and Roosevelt Schools since 1960-1961 and were enrolled

in the Watertown Junior High School during the 1965-1966 school year were selected as the basis for this study. The two groups were matched as closely as possible in age, sex, intelligence rating, and family socio-economic backgrounds.

The reading-grade achievement scores stated in average scores for grades three to six and the intelligence quotients measured while in the fourth grade were taken from the permanent school records, which were on file in the office of the principal of the Watertown Junior High School. These scores were tabulated, and charts were drawn to give a complete description of the reading achievement of students who were instructed by the Joplin Plan and the traditional plan for reading instruction.

The mean scores of reading-grade achievement and mental-grade equivalents for the classes from both schools in grades four to six during the 1960-1965 school years were procured from the reading-test results filed in the office of the elementary supervisor.

Consideration of the Hypothesis

Tables II, III, and IV contain pertinent data for the selected students³³ from each grade which were enrolled in the Watertown Junior High School during the 1965-1966 school year. Each chart indicates the number of the pair from each school with corresponding data revealing the sex, intelligence quotient as measured while attending the fourth grade in the Watertown public elementary school, the reading-grade

³³Hereafter in this comparative study, the word student or students will refer to those students participating in this study and does not intend to denote the entire school population of these schools while attending grades 3-6.

TABLE II
Record of Ninth-Grade Students
(1965-1966) Selected for Study*

L = Lincoln, R = Roosevelt

#	Boy- Girl	I.Q.	Grade 3	4	5	6	Gains Gr.6- Gr.3
L ₁	B	90	3.8	4.2	4.9	5.5	+1.7
R ₁	B	88	2.5	4.8	6.1	6.4	+3.9
L ₂	B	90	3.8	4.4	4.5	5.5	+1.7
R ₂	B	90	3.5	3.9	4.9	5.7	+2.2
L ₃	G	102	4.4	4.6	5.4	5.8	+1.4
R ₃	G	109	4.4	4.8	5.7	6.9	+2.5
L ₄	G	101	4.7	5.3	6.1	7.5	+2.8
R ₄	G	101	4.1	4.9	6.0	7.0	+2.9
L ₅	G	104	4.5	5.5	6.4	6.8	+2.3
R ₅	G	103	6.0	6.8	7.8	9.0	+3.0
L ₆	B	109	4.5	5.3	6.5	6.5	+2.0
R ₆	B	106	4.5	4.7	6.2	6.8	+3.0
L ₇	B	110	4.9	6.5	7.6	8.6	+3.7
R ₇	B	106	4.5	6.2	8.4	10.0	+5.5
L ₈	G	111	5.6	5.4	6.5	8.6	+3.0
R ₈	G	109	3.6	4.4	4.3	6.6	+3.0

*See pp. 6-7.

TABLE III

Record of Eighth-Grade Students
(1965-1966) Selected for Study*

L = Lincoln, R = Roosevelt

#	Boy- Girl	I.Q.	Grade 3	4	5	6	Gains Gr.6- Gr.3
L ₁	G	98	3.2	4.8	5.2	5.2	+2.3
R ₁	G	100	4.0	4.2	5.5	5.9	+1.9
L ₂	B	106	6.3	7.7	7.3	9.2	+2.9
R ₂	B	104	3.6	4.8	5.7	5.8	+2.2
L ₃	G	109	4.5	5.7	5.9	6.3	+1.8
R ₃	G	106	4.7	4.9	5.8	6.3	+1.6
L ₄	B	109	4.5	5.3	6.3	5.8	+1.3
R ₄	B	108	5.9	6.2	8.4	8.2	+2.3
L ₅	G	108	4.5	5.6	6.1	6.5	+2.0
R ₅	G	109	6.4	6.1	8.7	10.2	+3.8
L ₆	G	110	5.4	5.8	7.4	7.2	+1.8
R ₆	G	108	4.8	5.6	7.7	6.2	+1.8
L ₇	G	112	4.4	5.5	6.3	6.7	+2.3
R ₇	G	116	4.8	6.3	7.4	7.3	+2.5
L ₈	G	113	4.4	5.3	6.2	6.2	+1.8
R ₈	G	115	5.4	5.7	8.4	8.1	+2.7
L ₉	G	121	5.3	6.0	7.7	8.2	+2.9
R ₉	G	115	4.4	5.4	7.4	6.7	+2.3

*See pp. 6-7.

TABLE IV

Record of Seventh-Grade Students
(1965-1966) Selected for Study*

L = Lincoln, R = Roosevelt

#	Boy- Girl	I.Q.	Grade 3	4	5	6	Gains Gr.6- Gr.3
L ₁	G	87	4.1	4.7	4.6	6.0	+1.9
R ₁	G	90	3.6	4.8	5.4	4.6	+1.0
L ₂	B	103	4.8	5.9	4.6	7.8	+3.0
R ₂	B	101	4.8	5.2	6.7	7.5	+2.7
L ₃	G	103	4.7	6.2	6.8	8.3	+3.6
R ₃	G	100	3.9	4.7	4.8	6.1	+2.2
L ₄	B	104	3.8	5.7	5.7	5.7	+1.9
R ₄	B	104	4.9	7.1	7.8	8.7	+3.8
L ₅	G	114	5.2	6.4	6.4	8.8	+3.6
R ₅	G	118	6.1	6.8	9.2	10.5	+4.4
L ₆	B	114	5.0	6.3	8.6	8.6	+3.6
R ₆	B	113	5.0	7.3	7.2	8.0	+3.0
L ₇	G	115	4.8	6.1	6.0	7.4	+2.8
R ₇	G	117	6.4	7.1	8.6	11.3	+4.9
L ₈	G	123	5.1	6.4	7.0	8.9	+3.8
R ₈	G	125	6.9	7.6	9.5	10.9	+4.0

*See pp. 6-7.

achievement scores in grades three to six, and the reading gain measured in months (based on a ten month school year) which was derived by subtracting the standardized reading-test grade score in grade three from the standardized reading-test grade score in grade six.

Table V reveals the cumulative data expressing the total number of students from each pair who achieved higher reading-grade scores on the standardized achievement tests administered routinely while attending grades three to six in Lincoln and Roosevelt School, the total number of students from the pairs of students who had attained the greater gains in reading while in grades three to six, and the total number of months' gain for each of the compared groupings while participating in the traditional reading plan or the Joplin Plan.

TABLE V

Cumulative data from tables II, III, and IV

Grade	3	4	5	6	Gains	Total* Gains
Lincoln	10	12	8	9	8	619
Roosevelt	11	13	17	15	15	731
Same	4			1	2	
Total	25	25	25	25	25	

*Expressed in months based on ten-month school year.

The traditional reading plan³⁴ was used in all Watertown elementary schools in the primary grades (1-3). Table V points out the nearly equal

³⁴See p. 2 for a description of the traditional plan.

distribution of the paired students in attaining the higher scores. In Lincoln School ten students received higher grade-scores in grade three compared with eleven students from Roosevelt School. A total of four pairs had received identical scores while in grade three.

The Joplin plan was introduced in grade four in Roosevelt School. While in grade four, the Lincoln School groups included 12 students who had achieved higher reading-grade scores, and the Roosevelt School groups had 13 students who had scored higher than the Lincoln students in those pairs. There were no students in this grade category who scored identically.

While in grade five the ratio of students from Roosevelt School who achieved higher reading-grade scores than their component parts from Lincoln School was above the 2 to 1 ratio. Seventeen students from Roosevelt School, which participated in the Joplin Plan, were higher achievers on the same test battery as compared with eight students from Lincoln School. No pairs of students had identical scores.

When determining the total amount of gain in months³⁵ made by the students between the reading-grade scores achieved in grade three and those scores achieved in grade six, it was discovered that those students who received reading instruction in the Joplin Plan in Roosevelt School exceeded their paired partners who received reading instruction in the traditional reading plan in Lincoln School. Fifteen students from the pairs of students from Roosevelt School made greater total gains. Eight of the Lincoln School students among the paired students collected

³⁵Based on a ten-month school year.

TABLE VI

A. Frequency distribution of the total gains in months made in reading-grade achievement between grades 3-6 by the students in Lincoln and Roosevelt Schools.

Months' Gain (intervals)	Lincoln f	Roosevelt f
52-56		1
47-51		1
42-46		1
37-41	2	4
32-36	3	
27-31	6	7
22-26	3	7
17-21	9	2
12-16	2	1
7-11		1
	N = 25	N = 25
$M_L = 25$		
$M_R = 29.4$		

B. Frequency distribution of the total gains in months made in reading-grade achievement between grades 3-6 by the students with measured I.Q.'s of 110 and above.*

Months' Gain (intervals)	Lincoln f	Roosevelt f
52-56		1
47-51		1
42-46		1
37-41	2	1
32-36	2	
27-31	3	3
22-26	1	2
17-21	2	1
	N = 10	N = 10
$M_L = 29.5$		
$M_R = 34$		

*Both students in pair were considered when one or both members had measured I.Q.'s of 110 and above.

C. Frequency distribution of the total gains in months made in reading-grade achievement between grades 3-6 by the students with measured I.Q.'s of 100 and below.*

Months' Gain (intervals)	Lincoln f	Roosevelt f
37-41		1
32-36		
27-31		
22-26	1	1
17-21	3	1
12-16		
7-11		1
	N = 4	N = 4

$$M_L = 20.25$$

$$M_R = 25.25$$

*Both students in pair were considered when one or both members had measured I.Q.'s of 100 and below.

The following steps and formulas were used in computing the test of significance between the means of the two groups:

1. The standard deviation for each set of data was computed from the following formula: $s = \sqrt{\frac{\sum x^2}{(N-1)}}$. This formula was used because of the size of the sample.

2. The standard error of each mean was computed by the formula $SE_M = \frac{s}{\sqrt{N}}$.

3. The standard error of difference(D) between the two means was found from the formula: $SE_D = \sqrt{SE_{M_1}^2 + SE_{M_2}^2}$.

4. The "critical ratio" or t ratio was computed from the formula: $t = D/SE_D$.

5. The level of significance selected for rejection of the hypothesis was set at the .05 level.

The following results were obtained from the preceding formulas:

Lincoln School: $s = 7.36$

Roosevelt School: $s = 10.5$

Lincoln School: $SE_M = 1.47$

Roosevelt School: $SE_M = 2.10$

$SE_D = 2.56$

A t of 1.718 for 48 degrees of freedom was revealed. To determine the significance of this t , a table³⁶ designating the values of t and the degrees of freedom upon which it was based was consulted. The values for 50 df were selected because of the nearness of 48 df to it. In the .05 column for 50 df , the critical ratio(t) was 2.01; and in the .01 column for 50 df , the value was 2.68. The conclusion was drawn that the obtained difference between the two means of the students in the two reading plans was not great enough to justify the advantage of the Joplin Plan. A null hypothesis was accepted.

Table VII was prepared to determine whether the Joplin Plan would benefit the students with above-average intellectual capacities. A frequency tabulation (refer to Table VI,B, p.38) was prepared to determine the mean. The same steps and formulas listed on page 39 were used to determine whether the difference in the means of these two groups was significant.

The difference between the means of the experimental group and the control group with above-average intellectual ability yielded a critical

³⁶Henry E. Garrett, Elementary Statistics (2d ed.; New York: David McKay Company, Inc., 1962), pp. 182-83.

ratio(t) of 1.03 for 18 df. The values which correspond to the .05 level and the .01 level were 2.10 and 2.88. The t-score of 1.03 was not significant at either level. The conclusion that no difference existed between the gains achieved by students when taught by the traditional approach and the Joplin Plan was accepted.

TABLE VII

Distribution of gains made in reading-grade achievement by students with measured I.Q.'s of 110 and above.*

Months' Gain (intervals)	Lincoln f	Roosevelt f
52-56		1
47-51		1
42-46		1
37-41	2	1
32-36	2	
27-31	3	3
22-26	1	2
17-21	2	1
	N = 10	N = 10
$M_L = 29.5$		
$M_R = 34.0$		

*Both students in a pair were considered when one or both members had measured I.Q.'s of 110 and above.

Students with measured intelligence quotients of 100 or below were selected from the groups to determine whether students with below-average intelligence would benefit significantly from reading instruction in the Joplin Plan. Table VIII was prepared from the data collected for the students with this intellectual capacity. A frequency table (Table VI, C, p. 39) was prepared by the same procedure as used in Table VI, A, p. 38.

The same method of calculation was used as described on page 39 to determine whether the difference between the means of the two groups

with measured intelligence quotients of 100 and below was significant. The calculation revealed a critical ratio(t) of .726. The levels of significance for 6 df were 2.45 at the .05 level and 3.71 at the .01 level. The obtained critical ratio(t) of .726 was declared not significant at either level. It was acknowledged that students with measured intelligence quotients of 100 and below will not benefit significantly from reading instruction in the Joplin Plan.

TABLE VIII

Distribution of Gains made in reading-grade achievement by students with measured I.Q.'s of 100 and below.*

Months' Gain (intervals)	Lincoln f	Roosevelt f
37-41		1
32-36		
27-31		
22-26	1	1
17-21	3	1
12-16		
7-11		1
	N = 4	N = 4
$M_L = 20.5$		
$M_R = 11.11$		

*Both students in pair were considered when one or both members had measured I.Q.'s of 100 and below.

The information on the mental-grade averages and the reading-grade averages for the intermediate-grade classes in Lincoln and Roosevelt Schools between 1960-1965 was secured from the reading records on file in the office of the elementary supervisor and was placed in Table IX. The differences noted in the scores in the two schools when considering the mental-grades averages with the reading-grade scores are not

substantial to determine the superiority of either of the reading plans as presently employed in the Watertown school system.

TABLE IX

Class comparison of mental-grade averages and reading-grade averages in Lincoln School and in Roosevelt School when enrolled in grades 4-6.

	LINCOLN			ROOSEVELT		
	Class of 1960-63	Class of 1961-64	Class of 1962-65	Class of 1960-63	Class of 1961-64	Class of 1962-65
Grade Four						
Mental Grade	5.5	5.8 5.4	5.7	5.5 5.3	5.9 5.4	6.1 4.9
Reading-Grade Averages	5.4	6.1 5.0	5.7	5.5 5.4	6.2 5.3	6.7 5.0
Grade Five						
Mental Grade	6.6	6.9 6.5	6.6	6.5 6.5	6.8 6.4	7.2 6.0
Reading-Grade Averages	6.2	7.5 6.0	6.1	7.0 6.9	7.6 6.8	7.9 5.3
Grade Six						
Mental Grade	7.9	7.4	7.3	7.9 7.9	8.0 7.0	8.4 8.0
Reading-Grade Averages	7.4	6.6	7.0	8.2 7.8	8.3 6.5	7.9 7.3

The mental-grade scores and reading-grade scores for the total school population from 1959 through 1965 were compiled in Table X, p. 44. The results shown give no indication of the superiority of the Joplin Plan in raising the reading-grade level. Roosevelt School had included the Joplin Plan in its reading program in 1959. Garfield, McKinley,

Grant, and Mallette schools adopted the Joplin Plan in the fall of 1961. Lincoln School has never participated in this reading plan.

TABLE X

School averages by school years representing the Chronological-Age (CA), Mental-Age (MA), Mental-Grade (MG) Averages, and Reading-Grade Averages in Vocabulary (Voc.), Comprehension (Comp.), and Total (T).

School Year	Grade	C.A.	M.A.	M.G.	Voc.	Comp.	Aver.
(Iowa Basic) 1959-1960	4	10.1	10.8	5.5	5.6	5.9	5.7
	5	11.1	11.8	6.5	6.8	6.8	6.8
	6	12.1	12.11	7.6	7.9	7.4	7.8
1960-1961	4	10.1	10.9	5.6	5.6	5.5	5.6
	5	11.1	11.9	6.5	7.0	7.2	7.1
	6	12.1	13.2	7.9	7.9	7.8	7.9
1961-1962	4	10.1	10.9	5.7	5.6	6.1	5.9
	5	11.2	11.1	6.7	6.9	7.1	7.0
	6	12.1	13.5	8.1	8.0	8.0	8.0
1962-1963	4	10.1	10.8	5.6	5.7	5.7	5.7
	5	11.1	11.10	6.6	7.2	7.3	7.3
	6	12.1	13.2	7.9	8.1	8.0	8.1
(Stanford) 1963-1964	4	10.1	10.10	5.8	5.6	5.8	
	5	11.0	11.11	6.6	6.4	6.7	
	6	12.1	13.3	7.9	7.3	7.7	
1964-1965	4	10.2	10.10	5.7	5.4	5.6	
	5	11.1	11.11	6.7	6.8	6.9	
	6	12.1	13.6	8.2	7.7	8.0	

An essential factor which must be considered when determining the success or failure of any study plan is the attitude of those involved. The attitudes of the parents and teachers, and, most of all, the attitudes of the students involved in the plan must be considered.

In a telephone survey which the author of this study conducted, the parents of the students studied in the Joplin Plan generally favored the plan. Most parents believed their children benefited more from this type of reading instruction than from the traditional reading approach.

The majority of the students were in favor of the program. One student remarked, "If you had trouble in reading, you were placed in a group where you would get help. You weren't with those who were so much better."

The six teachers in grades four to six in Roosevelt School in 1965-1966 were asked to fill out a questionnaire pertaining to the Joplin Plan. Four of the teachers were holders of bachelor degrees, and two teachers had three years of college preparation. The number of years employed as a teacher of the Joplin Plan ranged from one year through nine years, with an average of six years.

The six teachers had taught the traditional reading plan. They reported that they had the classes divided into two reading groups in the traditional approach. When asked if they believed the two reading groups were adequate to cover the reading range of the students, four teachers answered, "No," and two replied, "Yes." The six teachers had agreed that the Joplin Plan more adequately provided for the reading-range of the students in one classroom. When the teachers were asked if six or seven groupings would have been possible in the traditional plan, the answer was unanimously, "No."

When rating the Joplin Plan, four of the teachers rated the program "Good," and two rated the plan "Excellent."

The final question on the questionnaire asked, "Are you in favor of the Joplin Plan? Why or why not? The following comments were made by three of the teachers:

More care should be given to grouping. One test should not determine the group a child is in. The above-average reader profits from the Joplin Plan, I believe, but I am not so sure about the average and below-average readers. I feel that the majority of the fourth graders should not be included in the Joplin Plan.

On the whole, I am in favor of it. However, in some ways I feel it would be better to group only between rooms so that fourth-graders would be only with fourth-graders, etc. Their interests would then be the same as well as their study-skill backgrounds.

The other comment made by one of the teachers was, "More time can be spent on each group!"

Summary

In this section two groups of students were selected from the seventh-, eighth-, and ninth-grade classes enrolled in the Watertown Junior High School during 1965-1966. The control group were taught reading through the traditional reading plan while in grades four to six at Lincoln School. A comparable experimental group were taught reading through the Joplin Plan while in grades four to six at Roosevelt School.

The hypothesis proposed was that there was a difference between the means of gains made by students participating in the Joplin Plan for reading instruction when compared with students of comparable ability who receive reading instruction by the traditional approach to reading. To test the significance of the difference between the two means, the "critical ratio" or t ratio was computed. To determine the significance of the t, a table with the given t and the degrees of freedom upon which it was based was consulted. The computed t ratio of 1.718 for 48 df did

not reach the .05 point of 2.01, much less the .01 value of 2.68. The conclusion was that the obtained difference of the two means was not significant, and a null hypothesis was accepted. The same test was applied to those students of high and low mental abilities. It was concluded that the obtained differences in the means of the gains made by the two intellectual groups were not significant. However, most of the evidence in the study tended to favor the Joplin Plan although the differences were not statistically significant at the .05 level of confidence.

CHAPTER IV

SUMMARY, CONCLUSIONS,
AND
RECOMMENDATIONSSummary

The major purposes of the present study were threefold. They were (1) to review the development of various grouping arrangements that have been effective for reading instruction; (2) to determine the significance of the difference between the means of the gains made in reading achievement between the Joplin Plan and the traditional reading plan at Watertown when tested under similar environmental and administrative conditions; and (3) to consider feasible recommendations for reading instruction.

The importance of reading has been clearly recognized in the elementary school. This has given impetus to the discovery of new methods for reading instruction. Several of the methods which were devised as a means of improving reading instruction and which are applicable to the intermediate grades were included in the survey of literature in Chapter II.

The Joplin Plan of reading instruction was designed to meet the individual needs of the elementary student more adequately than the traditional reading plan. According to the literature available, the Joplin Plan has been successful in improving the reading instruction in some schools. Other reading plans are being used in various schools throughout the United States. Some of these plans have been reviewed in Chapter II.

The Watertown school administration conceived the Joplin Plan to be an improvement over the traditional reading plan which had been in operation in the instructional program. The plan was first used in 1959-1960 in Roosevelt School. In 1961 the plan was adopted in each of the four larger elementary schools having six teachers in grades four to six. Lincoln School did not participate in the program because of its small enrollment. Lincoln School continued the traditional reading plan as the method of teaching reading.

The study of the two plans, which have been used simultaneously, was made from the cumulative records of students enrolled in the Watertown Junior High School in 1965-1966 and from the reading records in the office of the elementary supervisor.

All students who had attended Lincoln School in grades three to six were placed in a control group. Students who had attended Roosevelt School during the same period were selected in close proximity to the control group with respect to the characteristics of age, sex, intelligence, and socio-economic background. The students selected from Roosevelt School were placed in an experimental group.

Conclusions

The comparative study of the traditional reading plan and the Joplin Plan for reading instruction resulted in the following

Conclusions:

1. At the end of the sixth grade the experimental group received a higher mean score measured in months of gain in reading-grade achievement than did the control group. The difference between the means was

not significant at the .05 level and was dismissed as being too small to forecast an appreciable difference in the gains made in reading achievement for students enrolled in the Watertown elementary schools.

2. The hypothesis that the difference between the means of gains made by students participating in the Joplin Plan for reading instruction was significant when compared to students of similar caliber who received reading instruction by the traditional reading plan was not substantiated in this study. A difference in the means of the two reading plans was not noted from the reading-grade scores in the two schools when comparing the mental-grade scores with the reading-grade scores.

3. Statistically, the results shown in this study do not support the concept that the Joplin Plan is advantageous for students with below-average or above-average intelligence.

4. This study showed no spectacular reading gains in grades four to six for the total school population during the years 1960-1965 when compared with the mental-grade scores.

5. Any variations shown in the study tended to be favorable toward the Joplin Plan although the differences were not statistically significant at the .05 level of confidence. A larger sample might have shown significance at the .05 level of confidence.

6. From the surveys conducted for this study, parents, teachers, and students favor this plan.

Recommendations

In testing the experimental hypothesis, the t-test of significance (critical ratio) was applied to determine the significance of the

difference between the means. The level of significance selected for rejection was the .05 level. Although the hypothesis that the difference between the two means was significant was not accepted, the Joplin Plan for reading instruction is recommended. This recommendation is based upon the surveys conducted in Watertown among parents of children in the Joplin Plan, among teachers employed in grades four to six in Roosevelt School in 1965-1966, and among students who were in the Joplin Plan in the elementary grades. This last factor certainly is an important factor in the success of any educational plan.

The following suggestions are made for the Watertown version of the Joplin Plan for reading instruction. They are based on the survey of literature and on the observations made of the Watertown plan of teaching reading (in this study).

1. Establishing in-service training sessions would be beneficial to the teachers who participate in the Joplin Plan reading instruction. Remedial-reading teachers who are members of the faculty in the Watertown schools would be valuable resource people. The ideas of experienced teachers who have participated in the plan would be of value. All teachers within the system would benefit from the exchange of helpful ideas.

A "Joplin Plan Kit" is available for purchase from Cecil Floyd, Assistant Superintendent of Schools, Joplin, Missouri. This kit would provide materials for in-service training and for use in describing the plan to the parents. The kit contains five filmstrips, two recordings, and a teacher's manual showing the type of report to parents and other information about the plan.

2. Diagnostic reading tests purchased from a testing company or diagnostic reading tests developed within the school system should be administered throughout the school system within the first few weeks of school in the fall. This is a prerequisite to the planning of a reading program to fit the reading needs of the individual student.

3. Further investigation should be made to determine the effectiveness of the approach for teaching reading as presently employed in both reading plans in the Watertown school system. It should be determined to what extent the basic-reader approach has been misused³⁷. It may be appropriate to initiate new approaches for the instruction of reading.

4. Groups within each homogeneous reading class as provided in the Joplin Plan should be organized to accommodate the varied interest levels. The Austin Plan and the individualized-reading approach are such methods of grouping within a classroom. Groups lacking in specific reading-skills could be brought together for group instruction on these skills while the remaining members of the class would continue in the individualized assignments.

5. It is not recommended that the groupings should be within identical grade-rooms. The reading-range would continue to include six or seven levels.

Further study of the progress of students would be valuable. Reading gains, reading-grade scores, and mental-grade scores should be

³⁷Refer to pp. 21-22 for the uses and misuses of the basic reader listed by Nila B. Smith.

compiled several years prior to the study as well as during the period when the plan is in operation. This must be done to obtain the general reading trend of the groups which are being compared.

The method of instructing the reading classes has been the basic-reader approach. There is the possibility that other reading approaches may be applied to the Joplin Plan for grouping which may create a difference between the two means which may be significant.

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APPENDIX

SUMMARY OF
TEACHER QUESTIONNAIRE CONCERNING THE JOPLIN PLAN
FROM TEACHERS IN ROOSEVELT SCHOOL

1. How many years have you taught the Joplin reading plan?
2. Have you ever taught reading using the traditional basal-reader approach?
3. How many reading groups did you have in your room when using the basal-reader approach?
4. Do you feel these were adequate to cover the reading range of your students?
5. Would it be possible to have six or seven groups with the basal-reader approach as found in the Joplin Plan?
6. Does the Joplin Plan more adequately provide for this reading range?
7. How would you rate the Joplin Plan in caring for individual differences?
POOR - FAIR - GOOD - EXCELLENT
8. Are you in favor of the Joplin Plan? Why? Why not?

SUMMARY OF
PARENT QUESTIONNAIRE CONCERNING THE JOPLIN PLAN

1. Do you recall _____ (Child's name) _____ reading classes in the elementary school?
2. Did you like this reading arrangement where the students went to different grade rooms for reading?
3. Do you feel your child benefited more from this type of reading instruction than in the traditional classroom?
4. Would you agree that the Watertown Public School is concerned about individual differences found among school children?
5. How would you rate the Joplin reading program?
POOR - FAIR - GOOD - EXCELLENT
6. How would you rate the Watertown Public School System?
POOR - FAIR - GOOD - EXCELLENT

SUMMARY OF
STUDENT QUESTIONNAIRE CONCERNING THE JOPLIN PLAN

NAME _____

ADDRESS _____

GRADE _____

1. Did you attend the Watertown Public Elementary School? YES _____
NO _____
 2. Attended which elementary school? _____
 3. In elementary, did the students in the reading classes go to different classrooms for reading? YES _____ NO _____
CAN'T REMEMBER _____
 4. If reading students went to different classrooms, in what grade - or grades - were you? (Check either YES or NO for each grade.)
4th Grade: YES _____ NO _____
5th Grade: YES _____ NO _____
6th Grade: YES _____ NO _____
 5. Have you taken foreign language in seventh grade? YES _____ NO _____
-

WATERTOWN PUBLIC SCHOOLS
Watertown, S. Dak.

CONFERENCE - READING

Name _____ Date _____

This child is presently reading: (1) Above his grade level _____;
(2) On his grade level _____; (3) Below his grade level _____.

Exc. Good Ave. Fair Poor

1. Vocabulary

- a. Improvement (Spring Conference only)
- b. Dictionary Use
- c. Phonetic skills
- d. Interest and ability to use words

2. Oral reading - expression

3. Silent reading - understanding

- a. Selecting important information

4. Reads at satisfactory speed

5. Displays skill in use of supplementary reading, and information

COMMENTS:

SPECIFIC DIFFICULTIES:

HOW PARENTS MIGHT HELP:

Teacher

APPENDIX

JOPLIN PUBLIC SCHOOLS
Joplin, Missouri

READING PROGRESS REPORT

NAME

SCHOOL

GRADE YEAR

To Parents:

As you know, a different type of reading program has been organized in grades 4, 5, and 6. It is a program which makes it possible to meet the needs of each child and enable him to make more desirable progress.

This type of report is being used in place of the usual mark on the report card to inform you of your child's progress in Reading.

It is hoped that in this manner a little more information can be given to you than by merely giving a mark. Please study this report carefully, then sign and return promptly. Keep in mind that the reading level may differ from the grade level.

WORD SKILLS

	QUARTERS			
	1	2	3	4
1. Has a well developed understanding of and is able to use most skills which apply to word attack on his present level.				
2. Is developing independence in learning to attack new words by using phonetic and structural analysis skills.				
3. Has too great a tendency to guess at words instead of using word skills which have been learned.				
4. Has mastered some of the word attack skills but has many concepts yet to be learned.				
5. Has well developed dictionary concepts and skills and makes excellent use of this knowledge.				
6. Is making more use of the dictionary, but still needs considerable training.				
7. Is acquiring the basic vocabulary needed for his present level.				

RECREATORY AND SUPPLEMENTARY
READING

1. Number of books read this nine weeks.				
2. Does a large amount of reading with meaning and understanding on a variety of subjects.				
3. Is showing greater interest in independent reading.				
4. Needs to read a greater variety of materials.				
5. Needs to develop more interest and spend more time in reading.				
6. Could profit from using the Public Library more frequently.				

TEACHER COMMENTS AND SUGGESTIONS:

1st Quarter

2nd Quarter

3rd Quarter

4th Quarter

Signature of Parent:

1st Quarter

2nd Quarter

3rd Quarter

Item applies only if a check mark (✓) appears.

ORAL READING

	QUARTERS			
	1	2	3	4
1. Reads with ease and fluency at a satisfactory rate on his present level.				
2. Has shown considerable improvement in oral reading.				
3. Reads too slowly with a tendency to omit or substitute words.				
4. Has a tendency to read too rapidly, omits or mispronounces words and tends to ignore punctuation marks.				
5. Needs more training in projecting the voice and in expression.				
6. Is not consistent in oral reading. Reads well some days and on other days is careless.				

SILENT READING

1. Reads at a satisfactory rate with meaning and understanding on his present level.				
2. Has made definite improvement in ability to remember and relate what has been read.				
3. Still possesses some undesirable habits such as finger pointing, lip movements, and tension movements.				
4. Has difficulty in concentrating in silent reading which causes rather poor understanding.				
5. Needs to adjust rate of silent reading to type of material being read.				
6. Has some difficulty in stating main ideas of a paragraph or article and in interpreting implied meanings.				